

ABSTRACT

This invention relates to an apparatus for controlling the air-fuel ratio demanded by a fuel controller in order to maintain optimum performance of a catalytic converter. Provided is an open loop fuel controller comprising a detector arranged down stream of a catalyst for detecting rich breakthrough; a catalyst model having an estimator for estimating a stored oxygen level in the catalyst; a comparator for comparing an estimated stored oxygen level with a plurality of predetermined thresholds; demand adjusting means for adjusting an air fuel ratio demand in dependence upon a received signal from said comparator and upon a received signal from said detector. A method of open loop fuel control is also provided.